

## DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

Petition to Modify an Exemption of a

Previously Approved Antitheft Device;

## MITSUBISHI MOTORS R&D OF AMERICA

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Grant of petition to modify an exemption of a previously approved antitheft device.

SUMMARY: On February 2, 2009, the National Highway Traffic Safety Administration (NHTSA) granted in full Mitsubishi Motors R&D (Mitsubishi) of America's petition for an exemption in accordance with §543.9(c)(2) of 49 CFR Part 543, Exemption from the Theft Prevention Standard for the Mitsubishi Outlander vehicle line beginning with its model year (MY) 2011 vehicles. On August 6, 2012, Mitsubishi submitted a petition to modify its previously approved exemption for the Outlander vehicle line beginning with its model year (MY) 2014 vehicles. Mitsubishi also requested confidential treatment of specific information in its petition. The agency will address Mitsubishi's request for confidential treatment by separate letter. NHTSA is granting Mitsubishi's petition to modify the exemption in full because it has determined that the modified device is also likely to be as effective in reducing and deterring motor vehicle theft as compliance with the parts-marking requirements of the Theft Prevention Standard.

**DATES:** The modification granted by this notice is effective beginning with the 2014 model year (MY).

**FOR FURTHER INFORMATION CONTACT:** Ms. Deborah Mazyck, Office of International Policy, Fuel Economy and Consumer Programs, NHTSA, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Ms. Mazyck's telephone number is (202) 366-4139. Her fax number is (202) 493-2990.

**SUPPLEMENTAL INFORMATION:** On February 2, 2009, NHTSA published in the *Federal Register* a notice granting in full a petition from Mitsubishi for an exemption from the partsmarking requirements of the Theft Prevention Standard (49 CFR 541) for the Outlander vehicle line beginning with its MY 2011 vehicles (see 74 FR 5891, February 2, 2009). The Mitsubishi Outlander is currently equipped with a passive, transponder-based, electronic engine immobilizer device and an audible and visible alarm.

On August 6, 2012, Mitsubishi submitted a petition to modify the previously approved exemption for the Outlander vehicle line. This notice grants in full Mitsubishi's petition to modify the exemption for the Outlander vehicle line beginning with its MY 2014 vehicles. Mitsubishi's submission is a complete petition, as required by 49 CFR Part 543.9(d), in that it meets the general requirements contained in 49 CFR Part 543.5 and the specific content requirements of 49 CFR Part 543.6. Mitsubishi's petition for modification provides a detailed description and diagram of the identity, design, and location of the components of the antitheft device proposed for installation beginning with the 2014 model year.

The current antitheft device installed on the Mitsubishi Outlander included an electronic key, electronic control unit (ECU), and a passive immobilizer. Mitsubishi stated that entry models for the Outlander vehicle line are equipped with an immobilizer that functions via a Wireless Control Module (WCM). The features of the WCM include a transponder key, key ring antenna, Electronic time and alarm control system (ETACS) ECU, and Engine ECU and a

receiver antenna. Mitsubishi also incorporated an alarm system as standard equipment on all trimline vehicles. Mitsubishi stated that this is a keyless entry system in which the transponder is located in a traditional key and must be inserted into the key cylinder in order to activate the ignition. All other models of the Outlander vehicle line are equipped with an immobilizer that functions via a Keyless Operation System (KOS). The KOS utilizes a keyless system that allows the driver to push a knob in the steering lock unit to activate the ignition (instead of using a traditional key in the key cylinder) as long as the transponder is located in close proximity to the driver inside the vehicle.

Mitsubishi stated that once the ignition switch is turned to the "on" position, the transceiver module reads the specific ignition key code for the vehicle and transmits an encrypted message containing the key code to the electronic control unit (ECU). The immobilizer receives the key code signal transmitted from either type of key (WCM or KOS) and verifies that the key code signal is correct. The immobilizer then sends a separate encrypted start-code signal to the engine ECU to allow the driver to start the vehicle. The power train only will function if the key code matches the unique identification key code previously programmed into the ECU. If the codes do not match, the power train engine and fuel system will be disabled. Mitsubishi state that the only difference between the two keyless entry systems is the "key" and the method used to transmit the information from the key to the immobilizer.

In its 2014 modification, Mitsubishi stated that it will continue to offer the WCM as standard equipment for the entry models for the Outlander vehicle line but all models other than the entry models will be equipped with a One-touch Starting System (OSS). The features of the OSS are the Engine ECU, ETACS ECU, OSS ECU, KOS ECU, engine (power) switch, keyless Operation Key (transponder key) and LF antenna. The OSS utilizes a keyless system that allows

the driver to press a button located on the instrument panel to activate and deactivate the ignition (instead of using a traditional key in the key cylinder) as long as the transponder is located in close proximity to the driver. Mitsubishi stated that it will also introduce another model into the Outlander vehicle line beginning with its MY 2014 vehicle.

Once the ignition switch is pushed to the "on" position, the transceiver module reads the specific ignition key code for the vehicle and transmits an encrypted message containing the key code to the electronic control unit (ECU) which verifies that the key is correct. The immobilizer then sends a separate encrypted start-code signal to the engine ECU to allow the driver to start the vehicle. The engine will only function if the key code matches the unique identification key code previously programmed into the ECU. If the codes do not match, the engine and fuel system will be disabled. Mitsubishi further stated that the OSS has 250 million possible codes, making successful key code duplication nearly impossible. Mitsubishi stated that the immobilizer device and the ECU share security data when first installed during vehicle assembly, making them a matched set. These matched modules will not function if taken out and reinstalled separately on other vehicles. Mitsubishi also stated that the device is extremely reliable and durable because there are no moving parts, the key does not require a separate battery and it is impossible to mechanically override the device and start the vehicle.

Mitsubishi stated that the Mitsubishi Outlander has been equipped with the immobilizer device since MY 2007. Mitsubishi further stated that the OSS immobilizer device will be identical to the one installed on its Outlander Sport vehicle line. Mitsubishi was granted an exemption for the Outlander Sport vehicle line on February 14, 2011 by NHTSA (See 76 FR 8400) beginning with its MY 2012 vehicles. Since the agency granted Mitsubishi's exemption for its MY 2012 Outlander Sport vehicle line, there has been no available theft rate information

for this vehicle. Mitsubishi also informed the agency that the Eclipse, Galant, Endeavor, Outlander, Lancer, and I-MiEv vehicle lines have been equipped with a similar type of immobilizer device since January 2000, January 2004, April 2004, September 2006, March 2007, and October 2011 respectively, and they have all been granted parts-marking exemptions by the agency. Mitsubishi also stated that its Eclipse vehicle line has been equipped with a similar device since introduction of its MY 2000 vehicles. Mitsubishi further stated that the theft rate for the MY 2000 Eclipse decreased by almost 42% when compared with that of its MY 1999 Mitsubishi Eclipse (unequipped with an immobilizer device). Mitsubishi has concluded that the proposed antitheft device for its vehicle line is no less effective than those devices in the lines for which NHTSA has already granted full exemption from the parts-marking requirements. The average theft rates using 3 MY's data for the Mitsubishi Eclipse, Galant, Endeavor, Outlander and Lancer vehicle lines are 1.7356, 4.8973, 1.1619, 0.3341 and 1.0871 respectively. Theft rate data for the Outlander Sport and i-MiEV are not available.

The agency has evaluated Mitsubishi's MY 2014 petition to modify the exemption for the Outlander vehicle line from the parts-marking requirements of 49 CFR Part 541, and has decided to grant it. Since the same aspects of performance (i.e., arming and the immobilization feature) are still provided, the agency believes that the same level of protection is being met. The agency believes that the proposed device will continue to provide the five types of performance listed in §543.6(a)(3): promoting activation; attracting attention to the efforts of unauthorized persons to enter or operate a vehicle by means other than a key; preventing defeat or circumvention of the device by unauthorized persons; preventing operation of the vehicle by unauthorized entrants; and ensuring the reliability and durability of the device.

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If Mitsubishi decides not to use the exemption for this line, it should formally notify the

agency. If such a decision is made, the line must be fully marked according to the requirements

under 49 CFR Parts 541.5 and 541.6 (marking of major component parts and replacement parts).

NHTSA suggests that if the manufacturer contemplates making any changes, the

effects of which might be characterized as de minimis, it should consult the agency before

preparing and submitting a petition to modify.

Authority: 49 U.S.C. 33106; delegation of authority at 49 CFR 1.50.

Issued on: November 21, 2012

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Christopher J. Bonanti Associate Administrator for Rulemaking

**BILLING CODE: 4910-59-M** 

[FR Doc. 2012-28813 Filed 11/27/2012 at 8:45 am; Publication Date: 11/28/2012]